Application No.: 10/501,686 Amendment dated: July 27, 2009 Reply to Office Action of April 27, 2009 Attorney Docket No.: 21295.87 (E0614US) RECEIVED CENTRAL PAX CENTER JUL 2 7 2009

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims

Claim 1 (currently amended): [[Data]] A data processing method in a scanning microscope with a fast scanner, characterized by the following steps comprising:

acquisition of data blocks in real-time with a fast scanner;

transmission of the acquired data blocks to a computer system [[(23)]]; and the computer system processing of [[the]] selected data blocks [[as]] before other data blocks, the selection being a function of a frame burst ratio [[(N)]].

Claim 2 (currently amended): Method The method according to claim 1, characterized in that the transmission of the acquired data blocks is a function of the frame burst ratio (N): in which case wherein the frame burst ratio [[(N)]] is selected such that for optimal utilization performance of the computer system's (23) performance cusues system.

Claim 3 (currently amended): Method The method according to claim 2, characterized in that wherein the frame burst ratio [[(N)]] is selected by [[the]] a user as a function of the processing characteristics of the computer system, and in that it remains constant during acquisition of the data blocks.

Claim 4 (currently amended): Method The method according to claim 3, characterized in that wherein all data blocks (35₁₃, 35₂, ..., 35_n) are stored in the computer system (23), and in that those data blocks that are specified by the constant frame burst ratio (N) are processed before processing of the selected data blocks.

Claim 5 (currently amended): Method The method according to claim 1, characterized in that wherein adaptive control is envisioned that makes the frame burst ratio [[(N)]] variable.

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Claim 6 (currently amended): Method The method according to claim 5, characterized in that wherein an initial value is specified for the frame burst ratio [[(N)]] at the start of data acquisition.

Claim 7 (currently amended): Method The method according to claim 6, characterized in that wherein the frame burst ratio (N) determines the frequency of the transmitted data blocks and of the on/off ratio, respectively, and is adapted to the current performance of the computer system (23); in that all data blocks (35₁, 35₂, ..., 35_n) are stored in the computer system (23); and in that those data blocks that are specified by the variable frame burst ratio (N) are processed before processing of the selected data blocks.

Claim 8 (currently amended): Method The method according to claim 1, characterized in that the frame burst ratio (N) is selected by the user as a function of the processing characteristics of the computer system (23) and remains constant during acquisition of the data blocks, and in that at the same time only those wherein the selected data blocks that correspond to the fixed frame burst ratio (N) specified by the user are transmitted to the computer system (23) and are processed by the computer system (23) before the other data blocks.

Claim 9 (currently amended): Method The method according to claim 8, characterized in that wherein the other data blocks that have not yet been transmitted are transmitted to the computer system (23) with a delay and are then processed after the selected data blocks.

Claim 10 (currently amended): Method The method according to claim 1, characterized in that wherein the frame burst ratio (N) is selected as a function of the processing characteristics of the computer system (23) and are is adapted by the computer system during acquisition of the data blocks; and in that at the same time only those selected data blocks that correspond to the variable frame burst ratio (N) are transmitted to the computer system [[(23)]].

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Claim 11 (currently amended): Method The method according to claim 10, ebaracterized in that wherein the other data blocks that do not correspond to the variable frame burst ratio (N) are transmitted and/or processed to the computer system (23) with a delay after the selected data blocks.

Claim 12-17 (canceled)